SYSTEM AND METHOD FOR OPTIMIZING OPEN SHORTEST PATH FIRST AGGREGATES AND AUTONOMOUS NETWORK DOMAIN INCORPORATING THE SAME

ABSTRACT OF THE DISCLOSURE

Systems and method for selecting open shortest path first (OSPF) aggregates and aggregate weights for a particular area. In one embodiment, an aggregate selecting system includes: (1) a database for containing data pertaining to candidate OSPF aggregates and corresponding weights and (2) an aggregate selector, associated with the database, that selects at least a subset of the OSPF aggregates such that the shortest path length between the particular source and destination subnets resulting from advertisement of a set of weighted aggregates approaches the shortest path length between the particular source and destination subnets irrespective of the advertisement. embodiment, a weight selection system includes: (1) a database for containing data pertaining to candidate OSPF aggregates and (2) a weight assigner, associated with the database, that assigns, for the OSPF aggregates, weights based on either an average distance of subnets in the area for a particular area border router (ABR) of the area or a search heuristic.